



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,675	11/04/2003	Masahiro Fushimi	P24118	6479
7055	7590	06/03/2005	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			PENG, CHARLIE YU	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/699,675	FUSHIMI ET AL.	
	Examiner	Art Unit	
	Charlie Peng	2883	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 6, 7 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 10/699,675.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>02/02/04, 04/21/04, 02/22/05</u> | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 8-16, and 18-20 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent 4,978,190 to Veith. Veith teaches an optical module used for communication over optical waveguides having a laser diode **2** (light source), an optical waveguide **3** with a core **20** and a cladding **21**, lenses **12/13** controlled by a positioning device **18** to move light rays projected on the optical waveguide **3**, and a four-quadrant detector **16** receiving laser beams **7/11** reflected from the optical waveguide end face **14**. (See at least **Figs. 1 & 3** and their descriptions) Veith further teaches methods of coating to provide a cladding region **23** or the end face **14** with a higher reflectivity than a core region **22** of the end face **14**.

With specific reference to claims 2-5 and 10, Veith teaches that controlled adjustment is accomplished by moving the laser beams along x-axis and y-axis (boundary lines) until the light rays strike all quadrants evenly. (See at least **Figs. 2 & 3** and their descriptions at **Column 4, lines 20-51**) This is consistent with the claimed device where a controller controls the beam spot moving mechanism to adjust light amounts detected by the light detecting areas to have a predetermined ratio, e.g. the

controller controls the beam spot moving mechanism so that the light amounts detected by the light detecting areas become the same.

With specific reference to claims 8 and 9, Veith teaches the lenses **12/13** are a pair of plano-convex converging lenses facing opposite directions (i.e. they are converging light beams traveling in opposite directions). With lenses **12/13** properly adjusted, the light beams **7/11** are focused onto either the core region **22** or the detector **16**.

With specific reference to claim 12, Veith teaches an optical module having the optical waveguide **3** held by a guide sleeve **29**, a detector **16** that detects light beams reflected by a face of the optical waveguide **3**, and a focusing control that controls positioning of lens system **12, 13** with respect to a end face of the waveguide **3**. (See at least **Figs. 4 & 5** and their descriptions)

With specific reference to claims 13-16, 18, and 19, the limitations disclosed here are substantially the same as those of claims 2-5 and 10 and have been previously discussed and also rejected.

With specific reference to claim 20, the method is inherent to the optical communication device disclosed in claims 1 and 2, and it is therefore also rejected.

Allowable Subject Matter

Claims 6 and 17 are objected to as being dependent upon rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Veith teach the optical module for

Art Unit: 2883

communication having a light source, an optical fiber, a beam spot moving mechanism controlled by feedback of a light detector except for the light detector whose light detecting areas have a higher sensitivity at inner zones than outer zones. It is the examiner's opinion that the prior art of record, taken alone or in combination, fails to disclose or render obvious in combination with the rest of the limitations of the base claim.

Claims 7 is objected to as being dependent upon an objected claim 6, but would be allowable by virtue of being dependent upon an allowable claim 6.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. PGPub 2004/0213515 to Pezeshki et al.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charlie Peng whose telephone number is (571) 272-2177. The examiner can normally be reached on 9 am - 6 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Charlie Peng
Charlie.Peng@uspto.gov



Frank G. Font
Supervisory Patent Examiner
Technology Center 2800